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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/651,293	08/30/2000	KENTARO MATSUMOTO	862.C1992	2585

5514 7590 02/13/2003
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EXAMINER

ALI, MOHAMMAD

ART UNIT PAPER NUMBER

2177

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/651,293

Applicant(s)

MATSUMOTO ET AL.

Examiner

Mohammad Ali

Art Unit

2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This communication is responsive to the application filed on August 30, 2000.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The references cited in the IDS, PTO-1449, Paper No. 4, have been considered.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-2, 9-12, and 19-21 are rejected under 35 U.S.C. 102(e) as being anticipate by Vermeire et al. ('Vermeire', hereinafter), US Patent 6,209,124 B1.

As to claim 1, Vermeire discloses a recording apparatus for attaching, to binary data, meta-data as information related to the binary data, characterized (col. 5, lines 3-5). Vermeire teaches 'meta-data generation means for generating the, meta-data' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up

language applications (col. 5, lines 3-7). Further, Vermeire teaches, 'binary data generation means for generating the binary data to which the meta-data is to be attached' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Finally, Vermeire teaches, 'meta-data attaching means for attaching the meta-data to a plurality of binary data generated by said binary data generation means to generate binary data having meta-data' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications. Data structures involved (attached) in the host machine and application programs. Binary data streams received from the host into XML documents and to restructure XML documents into binary data streams capable of acting with host machine and its program applications (col. 5, lines 3-17).

As to claim 2, Vermeire teaches, 'characterized by further comprising storage means for storing the binary data having meta-data outputed by said meta-data attaching means' as host machine characteristics into a system of metadata which allows the reconstruction of requests and results into and out of mark-up languages binary data streams (Abstract, lines 4-7).

As to claim 9, Vermeire teaches, 'characterized in that said meta-data attaching means embeds the meta-data to a predetermined position of the binary data' as determined the host machine and programming architecture and host data structure (col. 5, lines 55-62).

As to claim 10, Vermeire teaches, 'characterized in that said meta-data attaching means attaches only information representing a file name of the meta-data or a location of the meta-data to a predetermined position of the binary data' as determined the host machine and programming architecture and host data structure (col. 5, lines 55-62).

As to claim 11, Vermeire discloses, a recording method of attaching, to binary data, meta-data as information related to the binary data, characterized (col. 5, lines 3-5). Vermeire teaches 'meta-data generation means for generating the, meta-data' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Further, Vermeire teaches, 'binary data generation means for generating the binary data to which the meta-data is to be attached' as metadata with XML representation

or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Finally, Vermeire teaches, 'meta-data attaching means for attaching the meta-data to a plurality of binary data generated by said binary data generation means to generate binary data having meta-data' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications. Data structures involved (attached) in the host machine and application programs. Binary data streams received from the host into XML documents and to restructure XML documents into binary data streams capable of acting with host machine and its program applications (col. 5, lines 3-17).

As to claim 12, Vermeire teaches, 'characterized by further comprising the storage step of storing the binary data having meta-data outputted by the meta-data attaching step' as host machine characteristics into a system of metadata which allows the reconstruction of requests and results into and out of mark-up languages binary data streams (Abstract, lines 4-7).

As to claim 19, Vermeire teaches, 'characterized in that the meta-data attaching step comprises embedding the meta-data to a predetermined position of the binary data' as determined the host machine and programming architecture and host data structure (col. 5, lines 55-62).

As to claim 20, Vermeire teaches, 'characterized in that the meta-data attaching step comprises attaching only information representing a file name of the meta-data or a location of the meta-data to a predetermined position of the binary data' as determined the host machine and programming architecture and host data structure (col. 5, lines 55-62).

As to claim 21, Vermeire discloses a storage medium which stores a processing program for attaching, to binary data, meta-data as information related to the binary data (col. 5, lines 3-5). Vermeire teaches 'meta-data generation means for generating the, meta-data' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Further, Vermeire teaches, 'binary data generation means for generating the binary data to which the meta-data is to be attached' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Finally,

Vermeire teaches, 'meta-data attaching means for attaching the meta-data to a plurality of binary data generated by said binary data generation means to generate binary data having meta-data' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications. Data structures involved (attached) in the host machine and application programs. Binary data streams received from the host into XML documents and to restructure XML documents into binary data streams capable of acting with host machine and its program applications (col. 5, lines 3-17).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-8 and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vermeire et al., ('Vermeire', hereinafter), US Patent 6,209,124 as applied to claims 1-2, 9-12, 19-20 in view of Leigh Klotz Jr. , ('Klotz', hereinafter), US Patent 5,459,307.

As to claim 3, Vermeire teaches, 'characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data output by said meta-data attaching means in a detachable storage' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one

ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 4, Vermeire teaches, 'characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data stored in said storage means in a detachable storage' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 5, Vermeire teaches, 'characterized in that said apparatus further comprises meta-data loading means for loading meta-data stored in advance in a detachable storage, and said meta-data attaching means attaches the meta-data loaded by said meta-data loading means to the binary data to generate the binary data having meta-data' as the language used in the applications program resident (attach) on host is identified fro MPADS. MPADS then loads the language-specific parser for the identified language (col. 17, lines 16-18). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's

system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 6, Vermeire disclosed, 'characterized in that said apparatus further comprises binary data loading means for loading binary data stored in a first detachable storage, and said meta-data attaching means attaches the meta-data to the binary data loaded by said binary data loading means to generate the binary data having meta-data' as the language used in the applications program resident (attach) on host is identified from MPADS. MPADS then loads the language-specific parser for the identified language (col. 17, lines 16-18). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 7, Vermeire teaches, 'characterized by further comprising binary-data having meta-data write means for writing the binary data having meta-data outputted by said meta-data attaching means in the first storage medium as a loading source of the binary data' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to

store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 8, Vermeire teaches, 'characterized by further comprising binary-data having meta-data write means for writing the binary data having meta-data stored in said storage means in the first storage medium as a loading source of the binary data' as the language used in the applications program resident (attach) on host is identified from MPADS. MPADS then loads the language-specific parser for the identified language (col. 17, lines 16-18). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 13, Vermeire teaches, 'characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data outputted by the meta-data attaching step in a detachable storage' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 14, Vermeire teaches, 'characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data stored in the storage step in a detachable storage' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 15, Vermeire teaches, 'characterized in that said recording method further comprises the meta-data loading step of loading meta-data stored in advance in a detachable storage, and the meta-data attaching step comprises attaching the meta-data loaded in the meta-data loading step to the binary data to generate the binary data having meta-data' as the language used in the applications program resident (attach) on host is identified fro MPADS. MPADS then loads the language-specific parser for the identified language (col. 17, lines 16-18). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 16, Vermeire teaches, 'characterized in that the recording method further comprises binary data loading step of loading the binary data stored in a first detachable storage, and the meta-data attaching step comprises attaching the meta-data to the binary data loaded in the binary data loading step to generate the binary data having meta-data' as the language used in the applications program resident (attach) on host is identified from MPADS. MPADS then loads the language-specific parser for the identified language (col. 17, lines 16-18). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 17, Vermeire teaches, 'characterized by further comprising the binary-data having meta-data write step of writing the binary data having meta-data outputted by the meta-data attaching step in the first detachable storage medium as a loading source of the binary data' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 18, Vermeire teaches, 'characterized by further comprising the binary-data having meta-data write step of writing the binary data having meta-data stored in the storage step in the first detachable storage medium as a loading source of the binary data' as the language used in the applications program resident (attach) on host is identified from MPADS. MPADS then loads the language-specific parser for the identified language (col. 17, lines 16-18). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

7. Claims 22-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vermeire et al., ('Vermeire', hereinafter), US Patent 6,209,124 B1 in view of Leigh Klotz Jr., ('Klotz', hereinafter), US Patent 5,459,307.

As to claim 22, Vermeire discloses a recording apparatus for attaching, to binary data, meta-data as information related to the binary data, characterized (col. 5, lines 3-7). Vermeire teaches, 'meta-data generation means for generating the meta-data' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Further Vermeire teaches, 'binary data loading means for loading the binary data to which the meta-data is to be attached from a first detachable storage' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Finally, Vermeire teaches, 'meta-data attaching means for attaching the same meta-data to a plurality of binary data loaded by said binary data loading means to generate binary data having meta-data' as metadata with XML

representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications. Data structures involved (attached) in the host machine and application programs. Binary data streams received from the host into XML documents and to restructure XML documents into binary data streams capable of acting with host machine and its program applications (col. 5, lines 3-17). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 23, Vermeire teaches, 'characterized by further comprising storage means for storing the binary data having meta-data outputted by said meta-data attaching means' as host machine characteristics into a system of metadata which allows the reconstruction of requests and results into and out of mark-up languages binary data streams (Abstract, lines 4-7).

As to claim 24, Vermeire teaches, 'characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data output from said meta-data attaching means in the first detachable storage as a loading source of the binary data' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16).

As to claim 25, Vermeire teaches, 'characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data output from said meta-data attaching means in a second detachable storage different from a loading source of the binary data' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16).

As to claim 26, Vermeire teaches, 'characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data stored in said storage means in the first storage medium as a loading source of the binary data' as the language used in the applications program resident (attach) on host is identified from MPADS. MPADS then loads the language-specific parser for the identified language (col. 17, lines 16-18).

As to claim 27, Vermeire teaches, 'characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data stored in said storage means in a second detachable storage different from a loading source of the binary data' as the language used in the applications program resident (attach) on host is identified from MPADS. MPADS then loads the language-specific parser for the identified language (col. 17, lines 16-18).

As to claim 28, Vermeire teaches, 'characterized in that said recording apparatus further comprises loading means for loading meta-data stored, in advance, in a detachable storage, and said meta-data attaching means attaches the meta-data loaded by said meta-data loading means to the binary data' as the language used in the applications program resident (attach) on host is identified from MPADS. MPADS then loads the language-specific parser for the identified language (col. 17, lines 16-18).

As to claim 29, Vermeire teaches, 'characterized in that said meta-data attaching means embeds the meta-data to a predetermined position of the binary data' as determined by the host machine and programming architecture and host data structure (col. 5, lines 55-62).

As to claim 30, Vermeire teaches, 'characterized in that said meta-data attaching means attaches only information representing a file name of the meta-data or a location of the meta-data to a predetermined position of the binary data' as determined by the host machine and programming architecture and host data structure (col. 5, lines 55-62).

As to claim 31, Vermeire discloses a recording method of attaching, to binary data, meta-data as information related to the binary data, characterized (col. 5, lines 3-7). Vermeire teaches, 'meta-data generation means for generating the meta-data' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Further, Vermeire teaches, 'binary data loading means

for loading the binary data to which the meta-data is to be attached from a first detachable storage' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Finally, Vermeire teaches, 'meta-data attaching means for attaching the same meta-data to a plurality of binary data loaded by said binary data loading means to generate binary data having meta-data' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications. Data structures involved (attached) in the host machine and application programs. Binary data streams received from the host into XML documents and to restructure XML documents into binary data streams capable of acting with host machine and its program applications (col. 5, lines 3-17). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 32, Vermeire teaches, 'characterized by further comprising a storage step of storing the binary data having meta-data output in the meta-data attaching step' as host machine characteristics into a system of metadata which allows the reconstruction of requests and results into and out of mark-up languages binary data streams (Abstract, lines 4-7).

As to claim 33, Vermeire teaches, 'characterized by further comprising a binary-data having meta-data write step of writing a binary data having meta-data output by the meta-data attaching step in the first storage medium as a loading source of the binary data' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16).

As to claim 34, Vermeire teaches, 'characterized by further comprising the binary-data having meta-data write step of writing the binary data having meta-data outputed by the meta-data attaching step in a second detachable storage different from a loading source of the binary data' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16).

As to claim 35, Vermeire teaches, 'characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data stored in the storage step in the first detachable storage medium as a loading source of the binary data' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16).

As to claim 36, Vermeire teaches, 'characterized by further comprising binary data having meta-data write step of writing the binary data having meta-data stored in the storage step in a second detachable storage different from a loading source of the binary data' as the language used in the applications program resident (attach) on host is identified from MPADS. MPADS then loads the language-specific parser for the identified language (col. 17, lines 16-18 et seq).

As to claim 37, Vermeire teaches, 'characterized in that the recording method further comprises a loading step of loading meta-data stored, in advance, in a detachable storage, and the meta-data attaching step comprises attaching the meta-data loaded in the meta-data loading step to the binary data' as the language used in the applications program resident (attach) on host is identified from MPADS. MPADS then loads the language-specific parser for the identified language (col. 17, lines 16-18).

As to claim 38, Vermeire teaches, 'characterized in that the meta-data attaching step comprises embedding the meta-data to a predetermined position of the binary data' as determined the host machine and programming architecture and host data structure (col. 5, lines 55-62).

As to claim 39, Vermeire teaches, 'characterized in that the meta-data attaching step comprises attaching only information representing a file name of the meta-data or a location of the meta-data to a predetermined position of the binary data' as determined the host machine and programming architecture and host data structure (col. 5, lines 55-62).

As to claim 40, Vermeire discloses a storage medium which stores a processing program for attaching, to binary data, meta-data as information related to the binary data processing program (col. 5, lines 3-7). Vermeire teaches, 'meta-data generation means for generating the meta-data' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Further Vermeire teaches, 'binary data loading means for loading the binary data to which the meta-data is to be attached from a first detachable storage' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Finally, Vermeire teaches, 'a meta-data attaching step of attaching the same meta-data to a plurality of binary data loaded by said binary data loading means to generate binary data having meta-data' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications. Data structures involved (attached) in the host machine and application programs. Binary data streams received from the host into XML documents and to restructure XML documents into binary data streams capable of acting with host machine and its program applications (col. 5, lines 3-17). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 41, Vermeire discloses a recording apparatus for attaching, to binary data, meta-data as information related to the binary data, characterized (col. 5, lines 3-7). Vermeire teaches, 'meta-data loading means for loading the meta-data from a first detachable storage' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML

representation for use in mark-up language applications (col. 5, lines 3-7). Further, Vermeire teaches, 'binary data generation means for generating the binary data' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Finally, Vermeire teaches, 'meta-data attaching means for attaching the same meta-data loaded by said meta-data loading means to a plurality of binary data generated by said binary data generation means to generate binary data having meta-data' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications. Data structures involved (attached) in the host machine and application programs. Binary data streams received from the host into XML documents and to restructure XML documents into binary data streams capable of acting with host machine and its program applications (col. 5, lines 3-17). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 42, Vermeire teaches, 'characterized by further comprising storage means for storing the binary data having meta-data outputted by said meta-data attaching means' as host machine characteristics into a system of metadata which allows the reconstruction of requests and results into and out of mark-up languages binary data streams (Abstract, lines 4-7).

As to claim 43, Vermeire teaches, 'characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data output from said meta-data attaching means in the first storage as a loading source of the meta-data' as the language used in the applications program resident (attach) on host is identified fro MPADS. MPADS then loads the language-specific parser for the identified language (col. 17, lines 16-18).

As to claim 44, Vermeire teaches, 'characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data outputed by said meta-data attaching means in a second detachable storage different from a loading source of the binary data' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16).

As to claim 45, Vermeire teaches, 'characterized by further comprising binary-data having meta-data write means for writing the binary data having meta-data stored in said storage means in the first detachable storage medium as a loading source of the meta-data' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16).

As to claim 46, Vermeire teaches, 'characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data stored in said storage means in a second detachable storage different from a loading source of the meta-data' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16).

As to claim 47, Vermeire teaches, 'characterized in that said apparatus further comprises binary data loading means for loading binary data stored in advance in a detachable storage, and said meta-data attaching means attaches the meta-data loaded by said meta-data loading means to the binary data to generate the binary data having meta-data' as the language used in the applications program resident (attach) on host is identified fro MPADS. MPADS then loads the language-specific parser for the identified language (col. 17, lines 16-18).

As to claim 48, Vermeire teaches, 'characterized in that said meta-data attaching means embeds the meta-data to a predetermined position of the binary data' as determined the host machine and programming architecture and host data structure (col. 5, lines 55-62).

As to claim 49, Vermeire teaches, 'characterized in that said meta-data attaching means attaches only information representing a file name of the meta-data or a location of the meta-data to a

predetermined position of the binary data' as determined the host machine and programming architecture and host data structure (col. 5, lines 55-62).

As to claim 50, Vermeire discloses a recording method of attaching, to binary data, meta-data as information related to the binary data, characterized (col. 5, lines 3-7). Vermeire teaches, 'a meta-data loading step of loading the meta-data from a first detachable storage' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Further, Vermeire teaches, 'a binary data loading step of loading the binary data from the first detachable storage' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Finally, Vermeire teaches, 'a meta-data attaching step of attaching the same meta-data loaded in the meta-data loading step to a plurality of binary data loaded in the binary data loading step to generate binary data having meta-data' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications. Data structures involved (attached) in the host machine and application programs. Binary data streams received from the host into XML documents and to restructure XML documents into binary data streams capable of acting with host machine and its program applications (col. 5, lines 3-17). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

As to claim 51, Vermeire teaches, 'characterized by further comprising the storage step of storing the binary data having meta-data outputed by the meta-data attaching step' as host machine

characteristics into a system of metadata which allows the reconstruction of requests and results into and out of mark-up languages binary data streams (Abstract, lines 4-7).

As to claim 52, Vermeire teaches, 'characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data outputed by the meta-data attaching step in the first storage as a loading source of the binary data' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16).

As to claim 53, Vermeire teaches, 'characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data outputed by the meta-data attaching step in a second detachable storage different from a loading source of the binary data' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16).

As to claim 54, Vermeire teaches, 'characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data stored in the storage step in the first storage medium as a loading source of the binary data'.

As to claim 55, Vermeire teaches, 'characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data stored in the storage step in a second detachable storage different from a loading source of the binary data' as binary data from a host into a user XML application and write XML documents in the opposite side of intermediary host application to read and write binary records (col. 6, lines 10-16).

As to claim 56, Vermeire teaches, 'characterized in that said method further comprises the binary data loading step of loading binary data stored, in advance, in a detachable storage, and the meta-data attaching step comprises attaching the meta-data loaded in the meta-data loading step to the binary data to generate the binary data having meta-data' as the language used in the applications program resident (attach) on host is identified fro MPADS. MPADS then loads the language-specific parser for the identified language (col. 17, lines 16-18).

As to claim 57, Vermeire teaches, 'characterized in that the meta-data attaching step comprises embedding the meta-data to a predetermined position of the binary data' as determined the host machine and programming architecture and host data structure (col. 5, lines 55-62).

As to claim 58, Vermeire teaches, 'characterized in that the meta-data attaching step comprises attaching only information representing a file name of the meta-data or a location of the meta-data to a predetermined position of the binary data' as determined the host machine and programming architecture and host data structure (col. 5, lines 55-62).

As to claim 59, Vermeire discloses a storage medium which stores a processing program for attaching, to binary data, meta-data as information related to the binary data processing program (col. 5, lines 3-7). Vermeire teaches, 'a meta-data loading step of loading the meta-data from a first detachable storage' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Further, Vermeire teaches, 'a binary data loading step of loading the binary data from the first detachable storage' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications (col. 5, lines 3-7). Finally, Vermeire teaches, 'a meta-data attaching step of attaching the same meta-data loaded in the meta-data loading step to a plurality of binary data loaded in the binary data loading step to generate binary data having meta-data' as metadata with XML representation or the binary data values to generate binary data for use with a host system or XML representation for use in mark-up language applications. Data structures involved (attached) in the host machine and application programs. Binary data streams received from the host into XML documents and to restructure XML documents into binary data streams capable of acting with host machine and its program applications (col. 5, lines 3-17). Vermeire does not disclose the external device or storage medium as depicted in figure 1 of the present invention. However, Klotz discloses an analogous system attaching with data wherein interprets the aggregate data of the storage sheet or sheets to be files stored on a removable external device where the information is associated (col. 6, lines 32-34). It would have been obvious to one ordinary skill in the art at of data generating, at the time of the present invention, to combine the teachings of the cited references because

Art Unit: 2177

the external device or storage medium of Klotz's system would provide Vermeire's with necessary infrastructure, which would allow it to store data in the external device or storage medium for future retrieval, as explained in Klotz, col. 6, lines 32-34 et seq.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see attached PTO-892.

a. US Patent No. 6,028,605, issued to Conard et al., on 02/22/00. The subject matter disclosed therein is pertinent to that of Claims 1, 11, 21, 22, 31, 40, 41, 50, and 59 (e.g. external device (personal computer), generating meta data, binary data etc.).

b. US Patent No. 6,381,628 B1, issued to Hunt, on 04/30/02. The subject matter disclosed therein is pertinent to that of Claims 1, 11, 21, 22, 31, 40, 41, 50, and 59 (e.g. external device (personal computer), generating meta data, binary data etc.).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Ali whose telephone number is (703) 605-4356. The examiner can normally be reached on Monday to Thursday from 7:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (703) 305-9790. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

Mohammad Ali

Patent Examiner

February 5, 2003

JEAN R. VERMEIRE
PRIMARY EXAMINER